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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,590	08/05/2003	Joseph Chappell	50229-380	4809
32301	7590	06/14/2006	EXAMINER	
CATALYST LAW GROUP, APC 9710 SCRANTON ROAD, SUITE S-170 SAN DIEGO, CA 92121			BAGGOT, BRENDAN O	
			ART UNIT	PAPER NUMBER
			1638	

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/633,590

Applicant(s)

CHAPPELL ET AL.

Examiner

Brendan O. Baggot

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 9-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/22/04; 5/10/04
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Restriction / Election***

1. The Office acknowledges the receipt of Applicant's restriction election, filed 3/31/06. Applicant elects Group I, claims 1-8, with traverse stating primarily that the Examiner has not shown independent or distinctness and serious search burden, because art not of record largely overlaps, and that the methods contain non-identical steps but yet are not unrelated. Applicant's traversal is unpersuasive for the following reasons: While a search of the prior art for one group may overlap with that of another group, they are not co-extensive of each other and thus would represent an undue burden on Office resources. Moreover, a search of the prior art for plant transformation would not be co-extensive with a search of the prior art for yeast/bacteria transformation. Furthermore, plants do not express genes in the same manner as yeast and bacteria, such as the glycosylation of proteins, and thus would require additional search consideration if the two inventions were rejoined. Claim 1-19 are pending. Claims 9-19 are nonelected. Claims 1-8 is/are examined in the instant application. This restriction is made FINAL.

### ***Sequence Listing***

2. Applicant's computer readable format sequence listing has been entered.

### ***Information Disclosure Statement***

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3. An initialed and dated copy of Applicant's IDS mailed 1/11/06, is attached to the instant Office Action.

***Oath / Declaration***

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

Inventor Bryan T. Greenhagen did not, upon execution of the oath, sign and date the oath.

***Drawings***

5. Figure 3 contains two drawings in one figure.

Under the OIPE review process, OIPE may object to and require corrected drawings within a set time period, if the drawings. . .

(E) have more than one figure and each figure is not labeled "Fig. " With a consecutive Arabic numeral (1, 2, etc.) or an Arabic numeral and capital letter in the English alphabet (A, B, etc.). See 37 CFR 1.84(u)(1).

M.P.E.P. § 507(E).

Appropriate correction is required in response to this Office Action. Applicant is required to amend the specification, including the Brief Description of the Drawings, to reflect changes in the drawings. See MPEP § 608.01(a).

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-5, 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laliberte et al. (Laliberte et al., Plant Mol Biol. (1992) Feb;18(3):447-51(U)) in view of Applicant's admitted prior art, and in light of Horsch *et al.* ((1995) Science Vol. 227:No. 4691, pp. 1229-1231(V)). Laliberte teaches a method for producing an intron-less full-length yeast cDNA comprising transforming *Agrobacterium* with a vector comprising a yeast gene of interest operably linked to a promoter(See Figure 2, Figure 1), infiltrating a leaf of a plant with the transformed *Agrobacterium* to express of the gene of interest (p. 448, rt. Col. first parag.), isolating total RNA from the infiltrated leaf (Figure 2), performing RT-PCR using the total RNA as template(Figure 2), and isolating

intron-less plant cDNA corresponding to the gene of interest from the products of RT-PCR(Figure 2; and Materials and Methods section).

Laliberte teaches a yeast gene rather than a plant gene. Applicant's admitted prior art teaches that plant genes also contain introns, like yeast genes (See specification, p. 1, 3<sup>rd</sup> and 4<sup>th</sup> parag.). Thus, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to substitute a yeast gene with a plant gene for the purposes of obtaining intron-less cDNAs of the plant gene. Accordingly, Substituting a yeast gene of interest with a plant gene of interest would have been obvious without any surprise or unexpected results.

The plant of the prior art is a tobacco plant, a dicot. Additionally, even though the prior art doesn't specifically teach petunia, host plant expression systems are interchangeable without any surprising or unexpected results as admitted by Applicant as prior art. (See Specification, p. 68). Thus, the method of Laliberte was carried out in the claimed invention time period

Laliberte teaches that the transformation method was performed using the method of Horsch. Horsch indicated that the infiltration was carried out for about 2-3 days (p. 1229, 3<sup>rd</sup> Col. first parag., last sent.).

The art also recognizes different plant transformation methods, including transformation and electroporation. Any known plant transformation method can be utilized without any surprising or unexpected results. (See Specification p. 16, Ln. 15-29). One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

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8. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laliberte et al. (Laliberte et al., Plant Mol Biol. (1992) Feb;18(3):447-51(U)) in light of Horsch, as applied to claims 1-5, 7, 8 above and further in view of Van Der Hoorn (Van der Hoorn, et al., (2000) Molecular and Plant Microbe Interactions Vol. 13, No. 4, pp. 439-446(W)). The teachings of Laliberte, and Applicant's admitted prior art have been discussed *supra*. The combination of Laliberte and Applicant's admitted prior art does not teach agroinfiltration. Van der Hoorn teaches agroinfiltration is a reliable, powerful, and versatile method of transformation of plant tissue with the gene of interest. (See p. 444, first full parag., last sent.; Cf. abstract). Thus, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to use agroinfiltration for the purposes of obtaining reliable plant tissue transformation. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

### Remarks

9. No Claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brendan O. Baggot whose telephone number is 571/272-5265. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on 571/272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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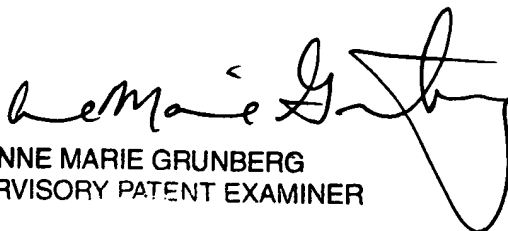
Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 6/8/06

Brendan O. Baggot  
Patent Examiner  
Art Unit 1638

\_\_\_\_\_  
Phuong T. Bui  
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ANNE MARIE GRUNBERG  
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